# jean-françoispambrun

researcher | engineer | software developer

about	education		
(514) 222-2085 6783 chambord montréal canada	2011-2016	Ph.D. in electrical engineering improving medical image compression and transmi	École de technologie supérieure (ÉTS)
	2009-2010	<b>M.Sc. in electrical engineering (incomplete</b> <sup>‡</sup> ) evaluation of the diagnostic quality of lossy compre	École de technologie supérieure (ÉTS) essed medical images
jf.pambrun@gmail.com linkedin://jpambrun github://jpambrun http://jfpb.net	2005-2009	<b>B.ing. in electrical engineering</b> information technologies and telecommunication	École de technologie supérieure (ÉTS)
languages	experience		
french/english  programming     java, javascript     matlab, python     linux, git, c, c++     latex, tensorflow  standards     dicom, ihe, hl7     jpeg 2000, jpip  interests     medical imaging     image compression     deep learning     rendering	2016 (dec-)	software developer cloud-based diagnostic workstation with client-side	nucleus.io
	2016 (jun-dec)	postdoctoral fellow MR-TRUS fusion and segmentation using deep neu	CHUM research centre ral networks
	2009-2016	lecturer procedural programming (inf1005a) software development environment (ele116) image processing and analysis (ele747)	cole polytechnique de montréal & ÉTS
	2007-2014	teaching assistants healthcare distributed systems (gts840) software development environment (ele116) image processing and analysis (ele747)	École de technologie supérieure (ÉTS)
	2009 (01-09)	software developer head-up display simulation for military flight simulation	CAE inc.
	2006-2008	<b>research assistant</b> École de technologie supérieure (ÉTS) implementation of a standard compliance validation tool for hI7v3 implementation and evaluation of a medical image streaming framework	
† not a member of the OIQ ‡ fast-track doctoral admission without obtaining a master's degree	awards		
	2017	NSERC postdoctoral fellowship (declined)	90,000\$
	2017	FRQNT postdoctoral fellowship (declined)	70,000\$
	2016	GRSTB postdoctoral fellowship	18,000\$
	2011	NSERC doctoral Alexander-Graham-Bell schola	arship 105,000\$
	2011	ÉTS excellence graduate student scholarship	60,000\$
	2011	FRQNT doctoral research scholarship (declined	60,000\$

FRQNT master's research scholarship

**NSERC** undergraduate student research awards

30,000\$

4.500\$

2009

2006

## **publications**

## articles in peer-reviewed journals

#### The utilization of MRI in the operating room

Ménard C, Pambrun J-F, Kadoury S

Brachytherapy. Elsevier, 2017

# Computed Tomography Image Compressibility and Limitations of Compression Ratio-Based Guidelines

Pambrun J.F., Noumeir R.

Journal of Digital Imaging. Springer Science, 2015

#### Teaching DICOM by Problem Solving.

Noumeir R., Pambrun J.F.

Journal of Digital Imaging. Springer Science, 2012

#### Streaming of medical images using JPEG2000 interactive protocol

Pambrun J.F., Noumeir R.

International Journal of Innovative Computing and Applications. 2012

#### Using JPEG 2000 Interactive Protocol to Stream a Large Image or a Large Image Set

Noumeir R., Pambrun J.F.

Journal of Digital Imaging. Springer Science, 2010

### international peer-reviewed conferences/proceedings

#### Limitations of the SSIM quality metric in the context of diagnostic imaging

Pambrun J.F., Noumeir R.

IEEE International Conference on Image Processing (ICIP), 2015

#### Compressibility variations of JPEG2000 compressed computed tomography

Pambrun J.F., Noumeir R.

IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC), 2013

# Perceptual quantitative quality assessment of JPEG2000 compressed ct images with various slice thicknesses

Pambrun J.F., Noumeir R.

IEEE International Conference on Multimedia and Expo, 2011

#### Interoperability testing of integration profiles based on HL7 standard version 3

Pambrun J.F., Noumeir R.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

#### Hands-on Approach for Teaching HL7 version 3

Noumeir R., Pambrun J.F.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

#### Streaming of Medical Images Using JPEG 2000 Interactive Protocol

Noumeir R., Pambrun J.F.

IEEE International Conference on Systems, Signals and Image Processing. 2010

#### Interoperability Testing Software for Sharing Medical Documents and Images

Berube R., Pambrun J.F, Noumeir R.

IEEE International Conference on Internet and Web Applications and Services. 2010

#### Images within the Electronic Health Record

Noumeir R., Pambrun J.F.

IEEE International Conference on Image Processing. 2009